ABSTRACT OF THE DISCLOSURE

A cell multiplexing apparatus comprising call monitors and multiplexers. The call monitors monitor a plurality of channels for their call setting status and select at least two channels for which the same cell may be assembled, i.e., for which the destination of the calls is the same. The multiplexers receive audio information or information already assembled in asynchronous transfer mode (ATM) cells from the channels selected by the call monitors, and disassemble and multiplex the received information for assembly into the payload of a new ATM cell.